## MERCHANT, GOULD, SMITH, EDELL, WELTER & SCHMIDT

## United States Patent Application

## COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor I hereby declare that: my residence, post office address and citizenship are as stated below next to my name; that

inventors are named below) of DEVICE FOR CALCULAGE GRATING ELEMENT, A	.f.khinat mattar which is slair	ned and for which a patent is sough TIENCIES OF A DIFFRACTION	clow) or a joint inventor (if plural
The specification of which a. X is attached hereto		•	
61	as application serial	l no and wa	s amended on (if
lineble) (in the case of a l	PCT_filed application) described at	nd claimed in international no.	Illed
and as amended on	(if any), which I ha	ve reviewed and for which I solici	it a United States patent.
by any amendment referred to the control of the con	o above.  sclose information which is materi, § 1.56 (see the last page attached ity benefits under Title 35, United alow and have also identified below application on the basis of which we been filed.	al to the examination of this application of the properties of the same of the	n, including the claims, as amended cation in accordance with Title 37, foreign application(s) for patent or inventor's certificate having a
FOREIG	N APPLICATION(S), IF ANY,	CLAMING PRIORITY UNDER	35 USC § 119
COUNTRY	APPLICATION NUMBER	DATE OF FILING (day, month, year)	DATE OF ISSUE (day, month, year)
Japan	9–258132	24 September 1997	
Japan	9–270933	3 October 1997	,
Japan	9–320127	20 November 1997	
ALL FOREIG	N APPLICATION(S), IF ANY, 1	FILED BEFORE THE PRIORIT	Y APPLICATION(S)
COUNTRY	APPLICATION NUMBER	DATE OF FILING (day, month, year)	DATE OF ISSUE (day, month, year)
L			

I hereby claim the benefit under Title 35, United States Code, § 120/365 of any United States and PCT international application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application.

U.S. APPLICATION NUMBER	DATE OF FILING (day, month, year)	STATUS (patented, pending, abandoned)

I hereby appoint the following attorney(s) and/or patent agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith:

```
Reg. No. 34,470
Reg. No. 32,960
Reg. No. 27,612
                                                                                           Reg. No. 36,797
Reg. No. 37,830
Reg. No. 38,729
Adriano, Sarah B.
                                                                                                                       Mueller, Douglas P.
                                                            Fauver, Cole M.
                                                                                                                                                            Req. No. 30,300
                                                                                                                      Nelson, Albin J.
Plunkett, Theodore
Pollinger, Steven J.
Reich, John C.
Batzli, Brian H.
Beard, John L.
                                                            Funk, Steven R.
                                                                                                                                                           Reg. No. 28,650
Reg. No. 37,209
                               Reg. No.
                                                                                           Reg. No.
                                                            Gabilan, Mary Susan
Gates, George H.
Beck, Robert C
                               Reg. No.
                                           28,184
                                                                                           Reg.
                                                                                                        33,500
                                                                                                                                                           Reg. No. 35,326
Reg. No. 37,703
                                           37,089
                                                                                                        26,896
Bejin, Thomas E.
                                                            Golla, Charles E.
                                                                                           Reg. No.
                               Reg. No.
                                                                                           Reg. No.
                                                                                                                       Reiland, Earl D.
Schmaltz, David G.
                                                                                                                                                           Reg. No. 25,767
Reg. No. P-39,828
                                           29,249
                                                                                                        38,472
Berman, Charles
                               Reg. No.
                                                            Gorman, Alan G.
                                                                                           Reg. No. 18,223
Bogucki, Raymond A.
                              Reg. No.
                                           17,426
                                                            Gould, John D.
Bruess, Steven C.
Byrne, Linda M.
                                                                                                       33,112
29,165
                                                                                                                                                           Reg.
                                                                                                                                                           Reg. No. 20,566
Reg. No. 31,197
                               Reg. No.
                                                            Gresens, John J.
                                                                                           Reg. No.
                                                                                                                       Schmidt, Cecil C.
                                           32,404
25,959
                                                                                           Reg. No.
Reg. No.
                                                                                                                       Schuman, Mark D.
                               Reg. No.
                                                            Hamre, Curtis B.
Carlson, Alan G.
Carter, Charles G.
Caspers, Philip P.
                                                                                                                       Schumann
                                                                                                                                    Michael D.
                                                                                                                                                                  No. 30,422
                               Reg. No.
                                                            Hassing, Thomas A.
                                                                                                                      Schald, Gregory A.
Sharp, Janice A.
Skoog, Mark T.
Smith, Jerome R.
Sorensen, Andrew D.
                                           35,093
33,227
                                                                                         Reg. No.
A.Reg No.
                                                                                                       31,838
38,491
                               Reg. No.
                                                            Hillson, Randall A.
                                                                                                                                                           Reg. No. 33,280
                                                                                                                                                                  No. 34,051
                                                            Hollingsworth, Mark
                               Req. No.
                                                            Johnston, Scott W.
Kastelic, Joseph M.
                                                                                                        P-39.721
                                                                                                                                                            Reg. No. P-40.178
Chiapetta, James R.
                               Reg. No.
                                           P-39.634
                                                                                           Req. No.
Clifford, John A.
Conrad, Timothy R.
Cooper, Victor G.
                                                                                                                                                           Reg. No. 35,684
Reg. No. 33,606
                                                                                                        37,160
                               Reg. No.
                                                                                           Reg. No.
                                                            Kettelberger, Denise Reg. No.
Kowalchyk, Alan W. Reg. No.
Kowalchyk, Katherine M. Reg. No.
Krull, Mark A. Reg. No.
                                                                                                        33,924
                               Reg. No.
                                           30,164
                                                                                                                      Stinebruner, Scott A.
Strawbridge, Douglas A.
Strodthoff, Kristine M.
                                           P-39,641
                                                                                                        31,535
                                                                                                                                                                  No. 38,323
                               Reg. No.
                                                                                                                                                           Reg. No. 28,376
Crawford, Robert
Daignault, Ronald A.
                               Reg. No.
                                           32,122
                                                                                                        36.848
                              Req. No.
                                                                                                        34,205
                                                                                                                                                            Reg.
                                                            Lacy, Paul A.
Lasky, Michael B.
Lynch, David W.
                                                                                                                      Summer, John P.
Summers, John S
Daley, Dennis R.
                               Reg. No.
                                           34,994
                                                                                           Reg. No.
                                                                                                        P-38.946
                                                                                                                                                           Reg. No. 29,114
                                                                                                        29,555
                                                                                                                                                            Reg. No. 24,216
                                                                                           Req. No.
Daulton, Julie R
                              Reg. No.
                                           36,414
                                                                                           Reg. No.
                                                                                                                      Tellekson, David K. Underhill, Albert L.
                                           38,424
                                                                                                        36,204
                                                                                                                                                           Reg. No. 32,314
Dayidson, Benjamin M.Reg. No.
                                                                                                                                                           Reg. No. 27,403
Dempster, Shawn B.
DiPietro, Mark J.
                                           34,321
28,707
                                                            Mau, Michael L.
                                                                                                        30.087
                              Reg. No.
                                                                                           Reg. No.
                                                                                                                      Vandenburgh, J. Derek
Welter, Paul A.
                               Reg. No.
                                                            McCormack, Myra H.
                                                                                           Reg. No.
                                                                                                        36,602
                                                                                                                                                           Reg. No. 32,179
                                                                                                                                                            Reg. No. 20,890
                                                                                                        37,674
Dryja, Michael A.
Edell, Robert T.
                              Reg. No.
                                           P-39,662
                                                            McDaniel, Karen D.
McDonald, Daniel W.
                                                                                           Reg. No.
                                                                                                                                                                        27,054
28,133
                                                                                           Reg. No. 32,044
                                                                                                                       Williams, Douglas J.
                              Reg. No. 20,187
Epp Ryan, Sandra
Farber, Michael B.
                              Reg. No.
                                           P-39.667
                                                            McDonald, Wendy M. Miller, William D.
                                                                                           Reg. No.
                                                                                                        32,427
                                                                                                                      Wood, Gregory B.
                                                                                                                                                           Reg.
                                                                                                                                                                  No.
                              Reg. No. 32,612
                                                                                                                      Xu, Min S.
```

I hereby authorize them to act and rely on instructions from and communicate directly with the person/assignee/attorney/firm/organization/who/which first sends/sent this case to them and by whom/which I hereby declare that I have consented after full disclosure to be represented unless/until I instruct Merchant & Gould to the contrary.

Please direct all correspondence in this case to Merchant, Gould, Smith, Edell, Welter & Schmidt at the address indicated below:

Merchant, Gould, Smith, Edell, Welter & Schmidt 3100 Norwest Center 90 South Seventh Street Minneapolis, MN 55402-4131

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

ı	Ŀ.	
	Đ	
	Ï	
	X	
_	<u>(</u>	Įn
	Ī	
	ñ	
	4	
	.===	=

2	Full Name Of Inventor	Family Name YAMAGA	TA	First Given Name Michihi	ro	Second Given Name
0	Residence & Citizenship	City Osaka		State or Foreign Country Japan		Country of Citizenship  Japan
1	Post Office Address	Post Office Address 2-59-710, Har JAPAN	naten-nishi		, Osaka-	-shi, Osaka 536-0011,
2	Full Name Of Inventor	Family Name BOKU		First Given Name Kazutak	e	Second Given Name
0	Residence & Citizenship	City Osaka		State or Foreign Country Japan		Country of Citizenship Korea
2	Post Office Address	Post Office Address 7-7-15, Nishiyamamotocho, Yao-shi, Osaka 581-0868, JAPAN				
2	Full Name Of Inventor	Family Name TANAKA City Hyogo		First Given Name Yasuhiro		Second Given Name
0	Residence & Citizenship			State or Foreign Country Japan		Country of Citizenship Japan
	Post Office Address	ost Office Post Office Address				
<u> </u>	Michibiro Yamagata		Signature of Inven			of Inventor 203 Asubiro Panaba
September 3, 1937		Date September 3, 1998 Date Se		asuhin Tanaha eptember 3,1998		

For Additional Inventors:

Y. Indicate here and attach sheet with same information, including date and signature.

2	Full Name Of Inventor	Family Name SASANO		First Given Name Tomohiko		Second Given Name	
0	Residence & Citizenship	City Osaka		State or Foreign Country		Country of Citizenship	
4	Post Office	Post Office Address	-	Japan		Japan	
	Address	3-9-12, Kishibe-kita, Suita-shi, Osaka 564-0001, JAPAN					
<u> </u>							
2	Full Name Of Inventor	Family Name ONO		First Given Name Shusuke		Second Given Name	
0	Residence & Citizenship	City Osaka		State or Foreign Country Japan		Country of Citizenship Japan	
5	Post Office Address	Post Office Address		T. I. I. I.			
		j Si-ii, rukaza	wanonmachı,	Takatsuki-shi, Osa	ka 569-	DO33, JAPAN	
2	Full Name Of Inventor	Family Name		First Given Name		Second Given Name	
0	Residence & Citizenship	City		State or Foreign Country		Country of Citizenship	
	Post Office Address	Post Office Address					
	Full Name Of Inventor	Family Name		First Given Name		Second Given Name	
0	Residence & Citizenship	City		State or Foreign Country		Country of Citizenship	
1	Post Office Address	Post Office Address					
1 1 1							
<b>7</b>	Full Name Of Inventor	Family Name		First Given Name		Second Given Name	
ō	Residence & Citizenship	City		State or Foreign Country		Country of Citizenship	
8	Post Office Address	Post Office Address					
2	Full Name Of Inventor	Family Name		First Given Name		Second Given Name	
0	Residence & Citizenship	City		State or Foreign Country		Country of Citizenship	
9	Post Office Address	Post Office Address					
Signa	Signature of Inventor 204 Signature of Inventor 205 Signature of Inventor 206						
Tomohiko Sasano «			Shu	isuhe Ono			
Date September 3, 1998 Date S		Date Septem	usuke Ono Date				
Signa	ature of Inventor 2	2U /	Signature of Inventor 208 Signature		Signature	Signature of Inventor 209	
Date	Date		Date		Date		

## § 1.56 Duty to disclose information material to patentability.

- (a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is cancelled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is cancelled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:
  - (1) prior art cited in search reports of a foreign patent office in a counterpart application, and
- (2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.
- (b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and
  - (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim;
  - (2) It refutes, or is inconsistent with, a position the applicant takes in:
  - (i) Opposing an argument of unpatentability relied on by the Office, or
  - (ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

- (c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:
- (1) Each inventor named in the application:
- (2) Each attorney or agent who prepares or prosecutes the application; and
- (3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.
- (d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.